

REMARKS

Claims 1-20 are pending. The independent claims are claims 1, 7, 14, and 20. Applicant respectfully submits that these claims should be allowed.

Applicant's previous response overcame the *Huang* reference, and overcame indefiniteness rejections. However, the *Miura* reference (U.S. Patent Application No. 2002/0185337) is still used to reject claims 1-2, 5-8, and 11-20 as anticipated under 35 USC § 102(e). Moreover, claims 3-4 and 9-10 are rejected as obvious under 35 USC § 103(a) from *Miura* in view of a new *Gooch* reference (U.S. Publication No. 2003/0182517).

The Present Claim Amendments

The independent claims 1, 7, 14 and 20 are now amended such that they include a further definition of the random access memory comprising a two-port memory (i.e. the subject-matter of the former claims 3 and 9). Consequently, the former claims 3 and 9 have been deleted. Furthermore, the simultaneous data transmission is defined to happen between said non-volatile random access memory and said random access memory. This limitation is fully supported by the specification as originally filed, and introduces no new matter.

The Independent Claims Should Now Be Allowable

The Office Action has correctly acknowledged that *Miura* does not disclose a two-port random access memory. Accordingly, in view of the amended claims, the anticipation rejections of the independent claims are no longer valid. *Miura* does not teach to use a two-port random access memory, and additionally, *Miura* is also completely silent about a solution wherein the random access memory is useable for running program code substantially simultaneously with the data being transmitted between non-volatile RAM and RAM via a memory controller.

The final Office Action also rejected the subject-matter of the former claims 3, 4, 9 and 10 under 35 U.S.C. §103(a) as being obvious to one skilled in the art, as a combination of *Miura* and *Gooch*. The *Gooch* reference discloses a system for sharing a computational resource by buffering multiple requests from multiple devices to a memory (e.g. a multi-port RAM or FIFO) in a single clock cycle. *Gooch*'s two-port RAM memory has a first write port and a second write port. A first request input is coupled to the first write port, and a second request input is coupled to the second write port. According to *Gooch*, a controller coupled to the memory is configured to control the memory to store a first request into the memory via the first write port and a second request into the memory via the second write port. The first and second requests are received via the first and second request inputs and stored into *Gooch*'s memory in a one clock cycle.

Accordingly, *Gooch* discloses a two-port RAM memory, wherein both ports are write ports and a controller bus is connected to both of these write ports. This means that it is not possible to run program code from a first port (this would require a first read/write port in a random access memory) substantially simultaneously with the data being transmitted between a non-volatile random access memory and the random access memory (this would require a second read/write port in the non-volatile random access memory). Furthermore, both write ports of *Gooch* share the same control bus, whereby simultaneous read and write operations are not possible.

Thus, a skilled person, when confronted with a problem of arranging simultaneous running of program code and transferring data between a non-volatile random access memory and the random access memory, has no motivation to combine the solution of *Miura* to a two-port RAM memory system, wherein both ports are write ports. Even if combined, the resulting system would not result in a solution according to the present claims, but rather would yield a system wherein only substantially simultaneous writing into said two memories would be possible.

CONCLUSION

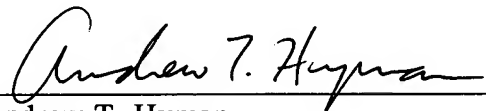
Applicants respectfully submit that the amended claims 1-20 of the present application therefore define patentable subject matter and are patentably distinguishable over the cited references for the reasons explained. The rejections of the final Office Action of March 9, 2005 having been shown to be inapplicable, retraction thereof is requested, and early passage of claims 1-20 to issue is earnestly solicited.

Applicant would appreciate if the Examiner would please contact Applicant's attorney by telephone, if that might help to speedily dispose of any unresolved issues pertaining to the present application.

Respectfully submitted,

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